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# PENDING APPLICATIONS

Law Department - Patent Section  
Philip Morris Management Corp.  
Privileged and Confidential

20 November 1992

2020109437

PM 1213 CIP IV REISSUE - SN 823001

METHOD AND APPARATUS FOR COATING EXTRUDED TOBACCO-CONTAINING  
MATERIAL

G. D. Keritsis

Schardt/F&N/Radulescu  
12-13-91 Filed in PTO.

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2020109438

**PM 1268 - SN 122760**

**(Project Art) PROCESS AND APPARATUS FOR THE SEMICONTINUOUS  
EXTRACTION OF NICOTINE FROM TOBACCO**

R. Prasad and H. Grubbs  
Tobacco Materials/Chemical Research

A process is provided for the improved removal of nicotine from tobacco. A nicotine-free solvent in the supercritical state is fed into a first end of an extraction system containing tobacco and a nicotine-rich solvent is discharged from a second end of the extraction system. Periodically a portion of extracted tobacco is discharged from the first end of the extraction system while simultaneously a portion of an unextracted tobacco is charged to the second end of the extraction system.

See also PM 1267 and 1355

Schardt/F&N/Krasnow

11-19-87	Filed in PTO; assignment recorded.
6-28-88	Information disclosure statement filed.
1-30-89	1st action.
6-30-89	Amendment filed.
10-31-89	Supplemental amendment filed.
10-27-89	2nd action.
11-3-90	Response filed.
1-19-90	3rd action allowing all claims.
3-1-90	Amendment filed.
6-20-90	Examiner communication suspending prosecution for 3 months pending availability of pertinent Supplemental IDS filed.
9-20-90	Status inquiry filed.
10-25-90	Meeting with Krasnow/inventors.
12-20-90	4th action.
3-19-91	Response filed.
12-23-91	5th action.
3-4-92	Response filed.
3-25-92	Supplemental amendment filed.
5-6-92	6th action.
7-1-92	Response filed.

Corresponding foreign applications filed in Argentina, Australia, Brazil, Canada, Finland, Japan, South Africa, and EPO designating Austria, Belgium, Switzerland, Germany, Spain, France, UK, Greece, Italy, Netherlands, and Sweden.

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PM 1279 - SN 246768

(Bonded Ends) DROPLET JET APPLICATION OF ADHESIVE TO CIGARETTE  
ENDS

R. Gaudlitz, J. Washington, and H. McCafferty  
Development Engineering

A method and apparatus are provided for applying an adhesive solution to the coal end of a cigarette by means of a precisely controlled liquid jet spray to bond shreds of tobacco in the cigarette end and to thereby reduce the amount of tobacco which falls out of the cigarette when shaken. The adhesive solution is sprayed by using a controlled continuous jet of the kind used in ink jet technology for the spraying of alpha-numeric character patterns. Electronic controls are employed to synchronize the formation of a series of droplets which are charged and deflected in prescribed paths to contact the coal end of the cigarette in a predetermined pattern. Circuits are provided to adjust the timing and phase of the charging mechanism to compensate for variations in the speed at which the cigarette is conveyed to a target area and for variations in the point of droplet formation.

See also CIP PM 1392

Schardt/F&N/Kennard

9-20-88 Filed in PTO; assignment recorded.

10-1-90 Notice of allowance.

12-13-90 Issue fee paid.

1-13-92 Checked status with F&N: PTO has lost file and is trying to locate it.

No corresponding foreign applications filed.

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2020109440

**PM 1283 - SN 585813**

(Filter Technology - Project Sauna) FILTER CIGARETTE

R. W. Newsome, A. S. Gergely, R. A. Thesing, W. T. Callaham, P. N. Gauvin, W. E. Claflin, and W. A. Nichols  
Cigarette Technology

A filter cigarette comprising a tobacco rod and filter portion comprising a fluted tubular extrusion. The flutes are blocked intermediate the rod end and mouth end of the extrusion. The tobacco rod is circumferentially wrapped with a porous wrapper comprising a longitudinal band of perforations. The fluted tubular extrusion is attached with tipping paper to the tobacco rod. A mouthband and a rodband of perforations circumscribe the tipping paper. A rod of charcoal-impregnated filter material may abut the tubular extrusion.

Glenn/F&N/Horowitz

9-20-90 Filed in PTO; assignment recorded.  
4-22-91 IDS filed.  
4-26-91 1st action.  
7-22-91 Amendment filed.  
8-27-91 Notice of allowance.  
11-6-91 Issue fee paid; amendment and formal drawings filed.  
5-7-92 Notice of abandonment (Patent Office misplaced drawings).  
5-29-92 Petition to withdraw abandonment granted.

Corresponding foreign applications filed in Japan and the EPO designating all countries except Luxembourg.

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2020109441

**PM 1307 DIV - SN 665968**

CRIMPED TEXTILE FIBERS AND STUFFER BOX APPARATUS AND METHODS FOR  
CRIMPING TEXTILE FIBERS

Michael Hill  
FML

Schardt/F&N/Ingerman  
3-7-91 Filed in PTO.  
4-27-92 Action.  
10-13-92 Response filed.

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**PM 1315 - SN 222961**

***\*ISSUED\****

(Delta - not used) SMOKING ARTICLE INCORPORATING A CERAMIC TUBE  
(DELTA)

C. Hayward, H. Lanzillotti, D. E. Merrill, E. B. Sanders, D. B. Losee, and J.  
Hearn

A smoking article in which a flavored aerosol is generated by heat transfer to a flavor bed from the combustion of a carbon heat source is provided wherein the carbon heat source and the flavor bed are contained within a non-combustible substantially cylindrical hollow ceramic sleeve. The article generates substantially no smoke, producing essentially only carbon dioxide, and has substantially no sidestream. The transfer of heat from the heat source is accomplished by convective and radiative heat transfer.

Schardt/F&N/Ingerman  
7-22-88 Filed in PTO.  
11-3-92 Issued: 5159940.

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2020109442

**PM 1322 CIP II CONT - SN 927734**

(Delta/Sigma) SMOKING ARTICLE

M. A. Serrano, K. S. Houghton, H. V. Lanzillotti, E. B. Sanders, A. C. Lilly, C. R. Hayward, J. R. Hearn, and D. B. Losee

A smoking article in which a flavored aerosol is generated by heat transfer to a flavor bed from the combustion of a carbon heat source is provided. The article generates substantially no sidestream smoke. The transfer of heat from the heat source to the flavor bed is accomplished by convective and radiative heat transfer.

Schardt/F&N/Ingerman  
8-12-92 Filed in PTO.

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**PM 1323 - SN 792012**

(Delta) SMOKING ARTICLE

J. M. Ehrman, C. H. Goldsmith, E. C. Grollmund, H. V. Lanzillotti, and A. C. Lilly  
R&D

A smoking article that produces no visible sidestream smoke in which at least the carbon heat source and the tobacco flavor producing elements can be ejected from a reusable body of the smoking article.

Schardt/F&N/Panichi  
11-13-91 Filed in PTO; assignment recorded.  
8-7-92 IDS filed.  
9-14-92 1st action rejecting all claims (response due December 14).  
9-30-92 Panichi instructed to draft response.

No foreign filing.

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2020109443

**PM 1328 DIV CONT - SN 782917**

**CONTAINER WRAPPER WITH INTEGRAL TEAR TAPE, AND METHODS AND APPARATUS FOR MAKING SAME**

Angel Amendola (Alford Packaging) and Xuan M. Pham

An outer wrapper for a container which includes an integral tear tape. The tear tape is formed by cutting two sets of score lines extending partially through the thickness of the wrapper material. The tear tape can be patterned to conform to the parting line along which the container opens, including oblique segments, thus allowing the container to be opened without interference from the parts of the wrapper which remain in contact with the container subsequent to removal of the tear tape.

Schardt/F&N/Horowitz

10-25-91 Filed in PTO.

10-7-92 Notice of allowance (issue fee due January 7--Howoritz will pay).

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**PM 1328 REEXAMINATION - SN 002669**

Angel Amendola (Alford Packaging) and Xuan M. Pham

An outer wrapper for a container which includes an integral tear tape. The tear tape is formed by cutting two sets of score lines extending partially through the thickness of the wrapper material. The tear tape can be patterned to conform to the parting line along which the container opens, including oblique segments, thus allowing the container to be opened without interference from the parts of the wrapper which remain in contact with the container subsequent to removal of the tear tape.

Schardt/F&N/Horowitz

3-13-92 Reexamination filed.

5-18-92 Order granting request for reexamination.

7-23-92 Supplemental IDS filed.

8-24-92 1st action.

10-21-92 Response filed.

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2020109444



**PM 1331 - SN 381762**

(Delta/Sigma) THERMAL INDICATORS FOR SMOKING ARTICLES

F. M. Sprinkel, J. M. Campbell, and D. B. Losee  
Physical Research

Thermal indicators for non-combustion smoking articles which chemically react when heated to provide visual indication of temperature changes. The indicators comprise organic acids, sugars, or amines combined with sugars. The indicators are printed in a variety of patterns along the length of the smoking articles to show temperature changes and to indicate whether the smoking article is finished and should be discarded. Methods for applying the indicators to smoking articles by using print wheels or spray jets are also disclosed.

Schardt/F&N/deBlasi

7-18-89 Filed in PTO; assignment recorded.  
9-25-90 Notice of allowance.  
10-31-90 Issue fee paid.  
3-14-91 Examiner called wanting to change "fluid" to "medium"--we agreed.  
8-30-91 Status inquiry.  
11-26-91 Ingerman authorized Millin by phone to make additional changes.  
7-31-92 Supplemental notice of allowability.

Corresponding foreign applications filed in Japan and East Germany.

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2020109445

PM 1334 CONT - SN 634110

METHODS AND APPARATUS FOR OPTICALLY DETERMINING THE  
ACCEPTABILITY OF PRODUCTS

Kenneth A. Cox and Robert J. Maher

The appearance of a product is determined to be acceptable or unacceptable by computing a discriminant function or image from a plurality of two-dimensional images of products of the kind to be inspected. A two-dimensional image of the product is then formed and processed using the discriminant image to produce an output value which can be compared to a predetermined value used in computing the discriminant image. If the output value deviates from the predetermined value by more than a predetermined amount, the product has been found to have an unacceptable appearance.

Glenn/F&N/Jackson

12-17-90 Filed in PTO; assignment recorded.

1-30-91 IDS filed.

6-11-91 1st action.

9-10-91 Amendment filed.

1-28-92 Supplemental IDS filed.

2-19-92 Supplemental amendment filed.

2-20-92 Notice of abandonment for failure to pay issue fee.

4-23-92 Petition to accept delayed payment of issue fee granted.

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2020109446

PM 1334 CIP - SN 696004

*\*ISSUED\**

METHODS AND APPARATUS FOR OPTICALLY DETERMINING THE  
ACCEPTABILITY OF PRODUCTS

K. A. Cox, H. M. Dante, and C. N. Harward, and R. J. Maher  
Physical Research

Improvements in methods and apparatus for optically determining  
whether or not a product has an acceptable appearance.

Related to PM 1514 and 1523

Glenn/F&N/Jackson

5-6-91 Filed in PTO; assignment recorded.

11-17-92 Issued: 5165101.

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2020109447

PM 1335CONT - SN 803174

(Beta) ELECTRICALLY POWERED LINEAR HEATING ELEMENT FOR A SMOKING DEVICE

S. C. Deevi and F. M. Sprinkel  
Physical Research

A heating element for use within a smoking device which non-combustibly heats a flavorant-containing material within the smoking device to produce an aromatic aerosol or vapor, which the smoker may inhale. More particularly, an electrically powered heating element having a plurality of discrete resistive heating segments, only one of which is active at any given time. In a preferred embodiment the heating element is contained within the smoking device so that the individual heating segments of the element are adjacent to a flavorant-containing material. As each segment of the heating element is provided with power, the flavorant-containing material adjacent to that segment is non-combustibly heated. This heating causes the flavorant-containing material to produce a flavored, aromatic aerosol or vapor, which the use of the device may inhale.

See also 1337

Glenn/F&N/Radulescu

12-5-91 Filed in PTO.

5-13-92 IDS filed.

5-15-92 1st action.

8-12-92 Response and terminal disclaimer filed.

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2020109448

PM 1336 - SN 639241

(Sigma) A METHOD FOR PRODUCING METAL CARBIDE HEAT SOURCES

S. C. Deevi, M. R. Hajaligol, and D. B. Losee  
Physical Research

A heat source comprising metal carbides and a method for preparing the same using reducing/carbidizing atmosphere is provided. The metal carbides making up the heat source have ignition temperatures that are substantially lower than conventional carbon particles normally used in carbonaceous heat sources, while at the same time provide sufficient heat to release a flavored aerosol, from a flavor bed for inhalation by the smoker. Upon combustion, the heat source produces substantially no carbon monoxide.

Schardt/F&N/Gross/Guiliano

1-9-91 Filed in PTO; assignment recorded.

11-13-91 IDS filed.

2-4-92 Formal drawings filed.

4-6-92 1st action.

8-5-92 Response filed.

10-16-92 2nd action (response due January 18--Gross drafting response).

Corresponding foreign applications filed in Japan, Korea, and the EPO designating all countries except Luxembourg.

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2020109449

PM 1337 CONT - SN 741736

Glenn/F&N/Ingerman(Beta) FLAVOR GENERATING ARTICLE (FLAVOR DOT - MULTIPLE AG BED)

M. E. Counts, B. C. LaRoy, D. B. Losee, C. H. Morgan, U. Smith, F. M. Sprinkel,  
F. V. Utsch  
Physical Research

An article is provided in which a flavor generating medium is electrically heated to evolve inhale the flavors or other components in vapor or aerosol form. The article has a plurality of charges of the flavor generating medium which are heated sequentially to provide individual puffs.

Glenn/F&N/Ingerman

8-7-91 Filed in PTO.

8-28-91 Preliminary amendment filed.

5-18-92 Notice of abandonment for failure to respond to action dated October 10, 1991.

5-28-92 Petition to revive (F&N never received action).

8-4-92 Status inquiry filed.

8-31-92 Petition to revive granted.

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2020109450

**PM 1340 - SN 494761**

***\*ISSUED\****

(Sigma/Delta) APPARATUS MAKING THIN LAMINATE STRUCTURES AND FORMING THE STRUCTURES INTO LIGHTWEIGHT, THIN-WALLED TUBES

Mike Braunshteyn, James E. Hall, Reginald W. Newsome, Jack C. Wheless,  
and Kathleen S. Whittle  
Engineering

An apparatus for laminating at least two strips of strip material and forming the laminate into lightweight, thin-walled tubular members that may be used in the construction of non-combustion smoking articles.

Glenn/F&N/Panichi

3-16-90 Filed in PTO.

12-8-92 Issued: 5169481.

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2020109451

PM 1347 - SN 556732

(Sigma) CATALYTIC CONVERSION OF CARBON MONOXIDE FROM  
CARBONACEOUS HEAT SOURCES

S. C. Deevi, M. R. Hajaligol, D. S. Kellogg, and B. E. Waymack  
Physical Research

This invention relates to an improved carbonaceous heat source, particularly useful in a smoking article, comprising a carbon component and a metal species. Upon combustion, the metal species acts as a catalyst to convert substantially all of the carbon monoxide produced on combustion of the carbon component to a benign substances.

Schardt/F&N/Gross

7-20-90 Filed in PTO; assignment recorded.  
3-25-91 1st action received.  
7-23-91 Response and IDS filed.  
12-11-91 2nd action.  
1-7-92 Response filed requesting copy of reference cited in action.  
6-8-92 Status inquiry filed.  
7-6-92 Examiner's communication transmitting reference cited in  
December 11 action.  
9-22-92 Response filed.

Corresponding foreign applications filed in Japan, South Korea, and EPO  
designating all countries except Luxembourg.

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2020109452



PM 1353 - SN 732619

(Sigma) MANUFACTURING OF COMPOSITE HEAT SOURCES CONTAINING  
CARBON AND METAL SPECIES

S. C. Deevi, M. R. Hajaligol, H. V. Lanzillotti, A. C. Lilly, D. B. Losee, and M. L. Watkins

Physical Research

Improved method for making a heat source comprising metal carbides are provided. the metal carbides heat sources have ignition temperatures that are substantially lower than conventional carbon particles normally used in carbonaceous heat sources, while at the same time provide sufficient heat to release a flavored aerosol, from a flavor bed for inhalation by the smoker. Upon combustion, the heat source produces substantially no carbon monoxide. The metal carbide is prepared by pre-forming the metal species/carbon source starting materials into a shape, and converting them to metal carbide in situ, without substantially altering the shape of the starting materials.

Schardt/F&N/Gross/Radulescu

7-19-91 Filed in PTO; assignment recorded.

12-13-91 IDS filed.

2-4-92 Formal drawings filed.

7-16-92 Election requirement.

8-5-92 Response filed electing product claims.

No foreign filing.

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2020109453

PM 1372 CIP (D689) - SN 924672

SCINTILLATION TUBE AND IONIZATION DETECTOR DYNAMIC CALIBRATION  
MONITOR AND FEEDBACK REGULATOR

David E. Sharpe  
Engineering

F&N/A. Smith

8-4-92 Filed in PTO; assignment recorded.

9-2-92 Talked to A. Smith. This is not really a CIP. Difference in  
1372 and this case: power is supplied to a detector verses a  
scintillation tube.

11-4-92 IDS filed.

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2020109454

**PM 1389 - SN 443636**

(Delta/Sigma) CHEMICAL HEAT SOURCE COMPRISING METAL NITRIDE, METAL OXIDE, AND CARBON

M. R. Hajaligoll, S. C. Deevi, S. D. Aripala, D. B. Losee, B. E. Waymack, and M. L. Watkins

Physical Research

A chemical heat source comprising metal nitride, metal oxide and carbon, particularly useful in smoking articles, and methods of making the heat source are provided. The metal nitride of the heat source has an ignition temperature substantially lower than conventional carbonaceous heat sources, while at the same time provides sufficient heat to release a flavored aerosol from a flavor bed for inhalation by the smoker. Upon combustion the heat source produces virtually no carbon monoxide. The metal nitride is prepared by pre-forming the starting materials into a desired shape, and converting them to metal nitride in situ, without substantially altering the shape of the starting materials.

Schardt/F&N/Guiliano

11-29-89 Filed in PTO.

8-20-92 Notice of allowance.

11-4-92 Issue fee paid.

Corresponding foreign applications filed in Japan, South Korea, and the EPO designating all countries except Luxembourg.

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2020109455

**PM 1390 (D474) - SN 913408**

(Bonded Rods) FOAM ADHESIVE COMPOSITION

J. Lee Gregory III and Theodore E. Majewski  
R&D

Relates to tobacco binders to be used in conjunction with a foam applicator.

See also PM 1391

Schardt/F&N/Godziela/Johnson  
7-15-92 Filed in PTO.

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**PM 1391 - SN 913406**

(Bonded Ends) FOAM ADHESIVE COMPOSITION

Theodore E. Majewski  
R&D

Relates to adhesive solutions containing polydextrose and foams made by injecting a gas such as air into such solutions.

See also PM 1390

Schardt/F&N/Godziela/Johnson  
7-15-92 Filed in PTO.

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2020109456

PM 1392 (CIP of PM 1279) - SN 731632

(Bonded Ends) DROPLET JET APPLICATION OF ADHESIVE OR FLAVORING SOLUTIONS TO CIGARETTE ENDS

Robert T. Gaudlitz, Hugh J. McCafferty, and J. M. Washington  
Development Engineering

A method and apparatus are provided for applying an adhesive or flavoring solution to the coal end of a cigarette by means of a precisely controlled liquid jet spray to bond shreds of tobacco in the cigarette end and to thereby reduce the amount of tobacco which falls out of the cigarette when shaken. Electronic controls are employed to synchronize the formation and charging of a series of droplets which are deflected in prescribed paths to contact the coal end of the cigarette in a predetermined pattern. Circuits are provided to adjust the timing and phase of the charging mechanism to compensate for variations in the speed at which the cigarette is conveyed to a target area and for variations in the timing of droplet formation.,

Schardt/F&N/Godziela/Johnson

4-19-91 Letter to C. Smith: look into inventorship question raised by B. Fischer.  
7-17-91 Filed in PTO.  
7-29-92 1st action (response due October 29).  
10-20-92 Draft response received.

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2020109457

**PM 1396 CONT. - SN 902426**

**SEPARATION PROCESS USING ORGANIC ACIDS AND NOVEL ORGANIC ACIDS**

R. N. Ferguson, C. R. Howe, H. V. Secor, and J. Seeman  
Chemical Research

In a preferred embodiment this invention provides novel organic acids which exhibit utility as liquid ion exchangers suitable for use in solvent extraction.

Schardt/Depaoli  
6-24-92 Filed in PTO.  
9-17-92 Preliminary amendment filed.

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**PM 1398 - SN 613013**

**(Sigma/Delta) SMOKING COMPOSITIONS CONTAINING A MENTHOL-RELEASE ADDITIVE**

W. Geoffrey Chan  
Chemical Research

In one embodiment, this invention provides a smoking composition which contains a flavorant additive which releases menthol under normal cigarette smoking conditions. The menthol-release additive is a mixture of menthyloxycarbonylglucose compounds which include more than 35 mole percent of 1-0-menthyloxycarbonyl-beta-d-glucopyranose and more than about 20 mole percent of 1,6-di-0-menthyloxycarbonyl-beta-d-glucopyranose.

Schardt/Depaoli/Giancola  
11-15-90 Filed in PTO; assignment recorded.  
3-10-92 Notice of allowance.  
5-27-92 Issue fee paid.

Corresponding foreign applications filed in Australia, Canada, Japan, and the EPO designating all countries except Luxembourg.

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2020109458

**PM 1399 - SN 765311**

**SMOKING COMPOSITIONS CONTAINING AN OXALATE FLAVORANT-RELEASE  
ADDITIVE**

W. Geoffrey Chan  
Chemical Research

In one embodiment this invention provides smoking compositions which contain a novel oxalate ester flavorant- release additive. Under cigarette smoking conditions, a combustible filler additive such as methyl 4-oxo-b-ionyl oxalate pyrolyzes and releases megastigma-5,7,9-trien-4-one as a natural flavorant component of the cigarette smoke.

Schardt/Depaoli  
9-25-91 Filed in PTO; assignment recorded.  
7-14-92 Notice of allowance.  
9-30-92 Issue fee paid.

No foreign filing.

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**PM 1399 DIV - SN 943037**

**SMOKING COMPOSITIONS CONTAINING AN OXALATE FLAVORANT-RELEASE  
ADDITIVE**

W. Geoffrey Chan  
Chemical Research

In one embodiment this invention provides smoking compositions which contain a novel oxalate ester flavorant- release additive. Under cigarette smoking conditions, a combustible filler additive such as methyl 4-oxo-b-ionyl oxalate pyrolyzes and releases megastigma-5,7,9-trien-4-one as a natural flavorant component of the cigarette smoke.

Schardt/Depaoli  
9-10-92 Filed in PTO.

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2020109459

PM 1399A - SN 822695

SMOKING COMPOSITIONS CONTAINING AN OXALATE FLAVORANT-RELEASE  
ADDITIVE

W. Geoffrey Chan  
R&D

In one embodiment this invention provides smoking compositions which contain a novel oxalate ester flavorant- release additive. Under cigarette smoking conditions, a combustible filler additive such as methyl 2-pyrazinyl-2-propanyl oxalate or di(2-pyrazinyl-2-propanyl) oxalate pyrolyzed and releases 2-isopropenylpyrazine flavorant as a volatile component of the cigarette smoke.

Schardt/Depaoli  
1-21-92 Filed in PTO; assignment recorded.  
9-30-92 Issue fee paid.

No foreign filing.

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2020109460



PM 1399A DIV - SN 942394

SMOKING COMPOSITIONS CONTAINING AN OXALATE FLAVORANT-RELEASE  
ADDITIVE

W. Geoffrey Chan  
R&D

In one embodiment this invention provides smoking compositions which contain a novel oxalate ester flavorant- release additive. Under cigarette smoking conditions, a combustible filler additive such as methyl 2-pyrazinyl-2-propanyl oxalate or di(2-pyrazinyl-2-propanyl) oxalate pyrolyzed and releases 2-isopropenylpyrazine flavorant as a volatile component of the cigarette smoke.

Schardt/Depaoli

9-9-92 Filed in PTO.

10-21-92 Telephone interview with Examiner: product claims (11-20)  
elected.

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2020109461

PM 1404 - SN 550177

STRING DOFFER MECHANISM

George S. Bosell, Joao C. A. Gomes, and Joseph P. Maciejczyk  
Engineering

A mechanism for removal of contaminants from a stream of material having a plurality of rotatable cylindrical doffer elements each having flights supplied with cleaning means thereon mounted substantially parallel to one another within a frame. The mechanism is provided with means for adjusting both the positions along the frame of the doffer elements as well as the vertical elevation of the doffer elements with respect to the frame.

Glenn/F&N/Panichi

7-9-90 Filed in PTO.  
9-10-90 Assignment recorded.  
10-3-90 IDS filed.  
3-18-91 1st action.  
6-18-91. Response and formal drawings filed.  
1-21-92 2nd action.  
2-28-92 Formal drawings filed.  
6-22-92 Response filed.  
8-10-92 3rd action (response due November 10).  
9-8-92 Panichi instructed to prepare draft response.

Corresponding foreign applications filed in Argentina, Brazil, Japan, South Korea, Turkey and the EPO designating all countries except Luxembourg.

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2020109462

PM 1405 - SN 892117

METHODS FOR REMOVING NON-METALLIC CONTAMINANTS FROM A STREAM OF  
MANUFACTURE

D. L. Bilunas, B. C. Kiernan, B. A. Semp, and C. R. Shade  
Engineering

This invention relates to methods for removing undesirable, non-metallic contaminants from a stream of manufacture, comprising treating the contaminants prior to their entry into the stream of manufacture by adding thereto a metallic substance, detecting the treated contaminants in the stream of manufacture with a metal detection means, and removing the detected contaminants from the stream of manufacture in response to such detection.

Schardt/F&N/Riesen

6-2-92 Filed in PTO; assignment recorded.

9-2-92 IDS filed.

No corresponding foreign applications.

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2020109463

PM 1406 (D546) - SN 710324

METHOD AND APPARATUS FOR DISPENSING A CONSTANT CONTROLLED  
VOLUME OF ADHESIVE

B. C. Kiernan, B. A. Semp, D. M. Driscoll, and D. L. Bilunas  
Engineering

Relates to controlling adhesive flow through a nozzle such that a consistent, continuously controlled volume of adhesive is dispensed on a moving substrate independent of other system and environmental parameters.

Glenn/F&N/Krasnow

6-4-91 Filed in PTO with IDS; assignment recorded.  
10-30-91 Restriction requirement.  
11-26-91 Response filed.  
1-24-92 Foreign filing recommendation requested.  
4-14-92 1st action rejecting all claims.  
8-5-92 Response and formal drawings filed.

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2020109464

PM 1411 - SN 806691

## AUTOMATED BOX BLANK HANDLING SYSTEM

D. Brookman, E. Grollimund, G. Grollimund, and S. F. Spiers  
Engineering

A system is provided for packing, shipping and automated unloading of stacks of box blanks so as to minimize damage to the box blanks and facilitate the insertion of the box blanks into an automated packaging machine. A fitted shipping case, filled with stacks of box blanks and upper and lower inserts, has a plurality of holes in its upper and lower flaps for cooperating with an automated unloading machine. The inserts enclosed in the shipping case minimize damage due to shifting of the box blank stacks, provide added resistance against case failure during transit, and cooperate with the automated unloading machine to facilitate removal of the box blank stacks from the shipping case. The automated shipping case unloading machine features a stationary case gripping portion, an upper portion for opening the shipping case and removing the upper insert, and a plurality of carriage assemblies for lifting the stacks of box blanks out of the shipping case and conveniently presenting the stacks to the human operator.

Glenn/F&N/Pisano

12-6-91 F&N instructed to file DIV of PM 1410 on claims 1-5; however they did not get it on file in time so it won't be a true divisional.

12-12-91 Filed in PTO.

3-16-92 Assignment recorded.

7-28-92 1st action rejecting all claims.

10-27-92 Response filed.

Foreign Filing: combined with PM 1410.

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2020109465

PM 1412 - SN 613160

PUTRESCINE N-METHYLTRANSFERASE, RECOMBINANT DNA MOLECULES,  
ENCODING PUTRESCINE N-METHYLTRANSFERASE, AND TRANSGENIC  
TOBACCO PLANTS WITH ALTERED NICOTINE CONTENT

H. Y. Nakatani and V. S. Malik  
Biochemical Research

There is provided highly purified tobacco putrescine N-methyltransferase, a process for its purification, and production of PMT DNA sequence. The purification process includes the step of applying a tobacco root extract to an anion exchange medium and specifically eluting putrescine N-methyltransferase with an elution buffer comprising putrescine.

Glenn/F&N/Creason

11-14-90 Filed in PTO.  
1-28-91 Assignment recorded.  
2-20-92 Restriction requirement.  
2-27-92 Response filed, Group I (Claims 1-15) elected.  
4-25-92 IDS filed.  
5-8-92 1st action.  
7-9-92 Response filed.  
10-1-92 Supplemental amendment filed.  
10-5-92 2nd action (response due (January 5)).  
11-10-92 Action to Kinser for comment.

Corresponding foreign applications filed in Brazil, Japan, Turkey, and the EPO designating all countries except Luxembourg.

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2020109466

**PM 1413 (D539, D569, D643, D644) - SN 757346**

**THERMALLY-REGULATED FLAVOR GENERATOR**

S. C. Deevi, M. R. Hajalicol, C. H. Morgan, W. A. Nichols  
Tobacco Fundamentals

Relates to a smoking article in which the delivery of flavor to the consumer during each individual puff of the article can be precisely controlled and regulated. As a result, the smoking article is capable of producing a constant quality of flavor delivery from the first to last puff of the article.

Schardt/F&N/Gross/Radulescu  
9-10-91 Filed in PTO.

Corresponding foreign applications filed in EPO and Japan.

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**PM 1414 - SN 789979**

(Delta/Sigma) FRACTIONATED PLANT EXTRACTS USEFUL AS FLAVORANTS AND ENHANCERS THEREOF AND METHODS FOR PREPARING AND USING THE SAME

Wynn R. Raymond and R. W. Hale  
R&D

Relates to tobacco extracts fractionated to be essentially nicotine-free and to processes for making and using the same.

Glenn/F&N/Radulescu  
11-12-91 Filed in PTO; assignment recorded.  
2-14-92 F&N instructed to proceed with IDS.  
8-13-92 1st action.  
11-13-92 Response filed.

No foreign filing.

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2020109467

PM 1415 - SN 865964

(Cast Sheet) RECONSTITUTED TOBACCO SHEETS AND METHODS FOR PRODUCING AND USING THE SAME

G. Gellitaly  
R&D

Relates to reconstituted tobacco sheets having improved quality and survivability due to an optimization of a mean tobacco particle size and a reduction in the air content of the slurry prior to casting the slurry into tobacco sheets.

Glenn/F&N/McCabe

4-9-92 Filed in PTO without signatures.

5-13-92 Inventor's comments sent to F&N--would preliminary amendment be in order?

6-9-92 Assignment recorded.

7-9-92 IDS filed.

Corresponding foreign applications filed in EPO, Argentina, Brazil, Czechoslovakia, China, Hungary, India, Indonesia, Japan, Korea, Malaysia, Mexico, Pakistan, Philippines, Poland, Russian Federation, Sweden, Thailand, Venezuela.

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2020109468



**PM 1420DES - SN 627966**

(Ambrosia) ODORLESS ASHTRAY

R. W. Newsome  
Cigarette Technology

Design for an odorless ashtray.

Glenn/F&N/Solomon

12-17-90 Filed in PTO.

11-3-92 Notice of allowance (fee due February 3--Ingerman will pay).

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**PM 1423-A (D581) - SN 929837**

(Beta) FLOW-MONITORING DEVICE FOR A FLAVOR-GENERATING ARTICLE

C. T. Higgins  
R&D

Relates to an electro-mechanical air flow monitor adapted to initiate a heating sequence within an electric flavor-generating article.

Glenn/F&N/Bergin

8-12-92 Filed in PTO; assignment recorded.

11-17-92 Draft IDS received.

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2020109469

PM 1425 (D592) - SN 723164

(Manufacturing) RESTRUCTURED TOBACCO DRYER

John N. Hickie  
Engineering

Apparatus and method in which reconstituted tobacco sheet is produced by applying a tobacco containing slurry to a heated cylindrical dryer.

Glenn/F&N/Brook

6-28-91 Filed in PTO.

2-26-92 IDS filed.

3-9-92 Restriction requirement.

4-6-92 Response filed, Group II (process) elected.

5-21-92 1st action.

10-21-92 Response filed.

No corresponding foreign applications were filed.

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2020109470

**PM 1426 - SN 679756**

(Manufacturing) UNIVERSAL MATERIAL CARRIER AND OVERHEAD MONORAIL SYSTEM

Gary E. Grollmund and Hannes K. Junginger  
Engineering

Apparatus and method for transporting a variety of cigarette and packaging components to the manufacturing and packaging areas of a cigarette manufacturing and packaging operation.

Glenn/F&N/Brook

4-3-91 Filed in PTO.

7-15-91 Assignment recorded.

10-25-91 1st action rejecting all claims.

4-27-92 Response filed.

Corresponding foreign applications filed in Japan and the EPO designating all countries.

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**PM 1427 (D595) - SN 746746**

(Manufacturing) TRASH REMOVAL APPARATUS AND METHOD

R. A. Arents and Everett C. Patterson  
Engineering

Apparatus and method for separating loose shreds of tobacco and large and small trash from rejected cigarettes.

Schardt/F&N/Brook

8-19-91 Filed in PTO.

11-6-92 Notice of allowance (fee due February 6--Brook will pay).

No foreign filing.

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**PM 1429 - SN 614620**

2020109471

(Paper Technology - Project Tomorrow - "Daubing Dandy") PAPER HAVING  
CROSSDIRECTIONAL REGIONS OF VARIABLE BASIS  
WEIGHT

J. Allen, G. H. Bokelman, N. Gautam, D. Kraske, J. L. Myracle, R. M. Rogers,  
and E. B. Sanders

This invention refers to a paper having cross directional regions having increased basis weight. The paper of this invention is especially useful as a wrapping material for a smoking article. The paper may be produced by depositing additional material onto a moving base web in a papermaking machine. The additional material is deposited by means of a rotating drum containing a plurality of slits through which the additional material passes.

Schardt/F&N/Horowitz

11-16-90 Filed in PTO.

7-19-91 Preliminary amendment filed.

11-12-91 Assignment recorded.

2-6-92 1st action.

2-25-92 IDS filed.

6-5-92 Response filed.

7-2-92 Supplemental IDS filed.

8-27-92 2nd action - final (response due November 27--Radulescu drafting response).

Corresponding foreign applications filed in Australia, Canada, Finland, Norway, Japan, and the EPO designating all countries except Luxembourg.

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2020109472

**PM 1431 - SN 656306**

(Filter Technology/CO Removal) CONVERSION OF CARBON MONOXIDE USING MIXED TRANSITION METAL OXIDE CATALYSTS

R. L. Augustine and S. Tanielyan (Seton Hall)  
Physical Research

This invention relates to improved catalysts for the oxidation of carbon monoxide and methods of preparing these catalysts. The catalysts of this invention are prepared using a sequential precipitation process which generates catalysts that contain substantially layered metal oxides, both supported and unsupported, and, in some embodiments of the invention, a noble metal or mixture of noble metals layered on the metal oxides. These catalysts are particularly useful in smoking articles.

See also PM 1676

Glenn/F&N/DeFranco/Loring  
2-15-91 Filed in PTO.  
9-13-91 IDS filed.  
10-21-91 1st action.  
12-26-91 Assignment recorded.  
2-21-92 Response filed.  
4-15-92 2nd action.  
10-9-92 Declaration filed.  
10-15-92 Response filed.

Corresponding foreign applications filed in Canada, Finland, Norway, Japan, Korea, and the EPO designating all countries except Luxembourg.

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2020109473

PM 1434 (D620) - SN 802339

*\*ISSUED\**

(Manufacturing) INNERFRAME FOR PACKING CIGARETTES OF VARIABLE DIAMETER IN A STANDARD WIDTH PACK

Jack R. Colgan, Howard H. Fishburne, Xuan M. Pham,  
Engineering

Relates to an innerframe inserted into a cigarette box for securely retaining a bundle of cigarettes of smaller than standard size circumference in a standard size cigarette box.

See also D623

Schardt/F&N/Panichi

12-4-91 Filed in PTO; assignment recorded.

10-27-92 Issued: 5158664.

No foreign filing.

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2020109474

**PM 1435 - SN 567810**

(Manufacturing/Cartier 10) METHOD WHERE EXPOSED FOIL ON TOP OF CIGARETTE BUNDLE IS FLAT WITH NO APPARENT FOLDS

John D. Barnes, Howard H. Fishburne, Xuan M. Pham, and Linwood L. Pitt  
Engineering

A method of folding foil around cigarette bundles where the exposed foil on the top of the bundle is flat with no apparent folds. The smooth flat appearance is created by forming the top folds prior to forming the side folds. Notches cut into the foil by which folding stresses on the outermost cigarettes in the bundle are reduced are also provided.

Glenn/F&N/Panichi

8-15-90 Filed in PTO; assignment recorded.

7-21-92 Notice of allowance.

10-7-92 Issue fee paid; formal drawings filed.

Corresponding foreign applications filed in Australia, Japan, South Korea and the EPO designating all countries except Luxembourg.

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2020109475

**PM 1438 - SN 567806**

(Manufacturing/Cartier 10) METHOD AND APPARATUS FOR  
ULTRASONICALLY BONDING ENDCAPS TO A CONTAINER OF DISSIMILAR  
MATERIAL

Jonah Adams and Steve Rinehart  
Engineering

A method and apparatus are provided for ultrasonically bonding endcaps to a food or tobacco product container comprised of a material dissimilar from the endcaps. Ultrasonic vibration is applied to the joint between the container and the endcaps, which includes a strip of preapplied adhesive, so that the adhesive partially melts. The partially melted adhesive quickly resolidifies, providing a durable bond without the disadvantageous and time consuming use of wet glues. The apparatus includes a pair of opposingly mounted ultrasonic devices, a controller associated with each ultrasonic device, and a general purpose computer programmed to synchronize and monitor the controllers.

Glenn/F&N/Pisano

8-15-90 Filed in PTO.

4-8-92 Supplemental amendment filed.

4-15-92 Notice of allowance.

6-17-92 Issue fee paid and supplemental IDS filed.

Corresponding foreign applications filed in Australia, Japan, South Korea, and EPO designating all countries except Luxembourg.

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2020109476



PM 1442 (D605) - SN 688154

(Delta/Sigma) THERMALLY RELEASABLE GEL-BASED FLAVOR SOURCE FOR  
SMOKING ARTICLES

W. A. Nichols, P. D. Lieberman, and M. E. Toerne  
Tobacco Fundamentals

A gel-based tobacco-containing thermally releasable flavor source that  
provides the sensations associated with the smoking of tobacco without  
the burning of tobacco.

Schardt/F&N/Gross/Radulescu

4-19-91 Filed in PTO; assignment recorded.

11-5-91 IDS filed.

5-4-92 1st action.

8-4-92 Response filed.

9-1-92 Supplemental IDS filed.

Corresponding foreign applications filed in Japan and the EPO designating  
all countries.

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2020109477

PM 1445 - SN 889457

CIGARETTE INSPECTION DEVICE

B. M. Evani, H. C. Longest, J. S. Osmalov  
R&D

Relates to an apparatus and method for the inspection of cigarettes using a rolling drum and a rolling block to expose nearly 360 degrees of a cigarette for a machine vision system to view cigarettes at two positions.

See also PM 1649/1666/1470

Schardt/F&N/Krasnow  
5-27-92 Filed in PTO; assignment recorded.  
9-2-92 IDS filed.

Combine with PM 1649 for foreign filing.

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2020109478

**PM 1446 - SN 657677**

(Robotics) AUTOMATIC TESTING OF A PLURALITY OF SMOKING ARTICLES

Wayne B. Adkins, C. T. Higgins, H. J. McCafferty, E. L. Moss, and J. I. Roncero  
Development Engineering

A computer-controlled robotic automatic test station that measures a selected number of a plurality of physical parameters of smoking articles and/or smoking article components in a selected sequence.

Schardt/F&N/Isackson

2-19-91 Filed in PTO.

10-11-91 IDS filed.

4-24-92 1st action.

7-15-92 Response filed.

9-30-92 2nd action (response due December 30).

Corresponding foreign applications filed in Japan and the EPO designating all countries except Luxembourg.

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**PM 1449 CONT - SN 933867**

(Robotics) APPARATUS AND METHOD FOR GRIPPING A CIGARETTE

Wayne B. Adkins and Jose I. Roncero  
Development Engineering

Method and apparatus for gripping cigarettes of different dimensions with the same two fingers of a robotic device.

Schardt/F&N/Ingerman/Radulescu

8-21-92 Filed in PTO.

10-9-92 1st action (response due January 9--Radulescu drafting response).

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2020109479

PM 1450 - SN 657436

(Robotics) APPARATUS AND METHOD FOR CUTTING A CIGARETTE

W. Adkins, E. L. Moss, and Jose Roncero  
Development Engineering

An automated method and apparatus for cutting a smoking article, such as a cigarette, into sections and removing a component, such as the filter section, from the article. A mechanical arm of a robot having opposing gripping members is used to grip and insert the article into the cutting apparatus whereupon a piston rod causes a blade edge to sever the article just above the filter. After the robot removes the filter from the apparatus, the filter is then ready to be subjected to characterization tests.

Schardt/F&N/Horowitz

2-19-91 Filed in PTO.

10-11-91 IDS filed.

4-2-92 1st action.

6-30-92 Response and formal drawings filed.

9-28-92 2nd action - final (response due December 28).

11-11-92 Draft response received.

Corresponding foreign applications filed in Japan and the EPO designating all countries except Luxembourg.

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2020109480

**PM 1458 - SN 794528**

(Sigma) METHOD AND APPARATUS FOR CUTTING, FORMING AND INSERTING CUPS INTO TUBES

Terry Babbitt, Mike Braunshteyn, A. J. Gillespie, Don H. Jones, Bill J. Keen, Robert H. Raynor, and Ray Ritt, and R. E. Talley  
Engineering

Relates to a method and apparatus for cutting aluminum disks out of a continually advancing strip of aluminum, forming the disks into cups, and maneuvering and inserting the cups into the ends of tubes.

Glenn/F&N/Horowitz

11-19-91 Filed in PTO; assignment recorded.

4-28-92 Notice of allowance.

6-30-92 Issue fee paid.

No foreign filing.

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2020109481

PM 1460 (D636) - SN 642295

APPARATUS AND METHODS FOR CUTTING RODS INTO LENGTHS FOR  
CIGARETTE MAKERS

M. A. Church, M. H. Dalton, Sherman C. Roane  
Engineering

Relates to improvements in cutting a continuous rod of material into lengths, particularly cutting an advancing cigarette rod into uniform lengths.

Glenn/F&N/Schuler

1-17-91 Filed in PTO; assignment recorded.  
4-22-91 IDS filed.  
1-4-92 Restriction requirement.  
1-16-92 Corrections forwarded to Matthews for drawings.  
3-5-92 Response filed - Group I (claims 1-16) elected.  
7-9-92 Supplemental IDS filed.  
6-9-92 1st action.  
7-9-92 Supplemental IDS filed.  
10-5-92 Response filed.

Corresponding foreign applications filed in Japan and the EPO designating all countries except Luxembourg.

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2020109482

**PM 1464 (D642) - SN 688436**

(Ambrosia) SMOKING COMPOSITIONS CONTAINING A VANILLIN-RELEASE  
ADDITIVE

W. G. Chan, H. Grubbs, Y. Houminer, K. Podraza, and T. Sanders  
Chemical Research

Schardt/Depaoli/Giancola

4-22-91 Filed in PTO; assignment recorded.

7-29-92 Notice of allowance.

9-29-92 Issue fee paid.

Corresponding foreign applications filed in Canada, Japan, and the EPO  
designating all countries.

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**PM 1464 DIV - SN 946519**

(Ambrosia) SMOKING COMPOSITIONS CONTAINING A VANILLIN-RELEASE  
ADDITIVE

W. G. Chan, H. Grubbs, Y. Houminer, K. Podraza, and T. Sanders  
Chemical Research

9-17-92 Filed in PTO.

10-20-92 IDS filed.

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2020109483

**PM 1465 (D649) - SN**

(FACT) ACID-CONTAINING FILTERS FOR IMPROVING AIR QUALITY

C. R. Hayward and J. O. Lephardt  
R&D

Relates to filter materials which have been coated with an acid for use in indoor air quality control systems to remove cigarette gas phase components and other pollutants.

Glenn/F&N/Gross/Radulescu  
11-16-92 Filed in PTO.

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**PM 1466 CONT - SN 845738**

(Paper Technology) WRAPPER FOR A SMOKING ARTICLE

S. D. Baldwin, G. H. Bokelman, B. L. Goodman, B. L. Floyd, and S. S. Tafur  
Chemical Research

The sidestream smoke associated with a cigarette or cigarette-like smoking article is reduced by wrapping the tobacco in a paper wrapper having an additive, such as an organic acid, an acidic salt or an organic acid in combination with an acidic salt added thereto.

See also PM 1444, 1494, 1441, and 1511

Glenn/F&N/Miraglia  
3-2-92 Filed in PTO.  
5-15-92 Preliminary amendment and supplemental IDS filed.  
5-22-92 1st action.  
8-24-92 Response filed.

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2020109484



**PM 1468 - SN 943318**

**(Beta) HEATING ELEMENT FOR AN ELECTRICALLY-HEATED SMOKING ARTICLE**

S. C. Deevi, M. R. Hajaligol, Herbert Herman, C. T. Higgins, Mike Watkins, B. E. Waymack, and S. Yi  
R&D

Relates to a smoking article in which a flavor-generating medium, for example tobacco, is heated electrically to produce a flavor-containing aerosol.

Glenn/F&N/Bergin

9-10-92 Filed in PTO.

10-8-92 Need to reexecute formal documents.

10-27-92 Documents to. Herman for execution.

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**PM 1469DIV - SN 664878**

**OVERWRAP INSERT**

D. A. Thomas, R. M. O'Connell, R. C. Reinert, and J. M. Gillin  
Alford Packaging

Paper stock is unwound, printed, folded, laminated and cut to form inserts. The laminated inserts are applied to an overwrap at an appropriately spaced interval. The resultant overwrap can then be wrapped around cigarette packs to provide each pack with an insert without slowing down production.

Schardt/Ostrolenk

3-5-91 Filed in PTO.

5-10-91 Restriction requirement.

9-11-91 1st action.

12-11-91 Amendment filed.

3-24-92 2nd action - final.

6-24-92 Amendment filed.

10-2-92 3rd action (response due January 2).

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2020109485

**PM 1474 DES (D634) - SN 675463**

(Beta) DESIGN - DELIVERY ARTICLE

E. S. Gee, A. C. Lilly, D. B. Losee, J. L. Myracle, Jr., C. H. Morgan, F. M. Sprinkel, F. V. Utsch, and J. F. Whidby

Glenn/F&N/Farber

3-25-91 Filed in PTO; assignment recorded.

7-30-92 1st action.

10-22-92 Response filed.

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**PM 1475 CONT - SN 808640**

(Beta) FLAVOR GENERATING ARTICLE

F. V. Utsch, C. H. Morgan, F. M. Sprinkel, and D. B. Losee  
Physical Research

An article is provided in which a flavor generating medium is electrically heated to combustion to evolve inhalable flavors or other components in vapor or aerosol form. The article has a plurality of charges of the flavor generating medium which are heated sequentially to provide individual puffs.

Glenn/F&N/Radulescu

12-17-91 Filed in PTO.

8-7-92 Notice of allowance.

10-14-92 Issue fee paid.

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2020109486

**PM 1476 CONT - SN 875214**

**FILAMENTARY FLAVORANT-RELEASE ADDITIVE FOR SMOKING COMPOSITIONS  
CONTAINING A MENTHOL-RELEASE ADDITIVE**

James M. Washington  
Development Engineering

In one embodiment this invention provides a cigarette product which contains a novel type of flavorant-release monofilament. The encapsulated flavorant is released under normal smoking conditions.

Schardt/Depaoli/Giancola  
4-28-92 Filed in PTO.

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**PM 1477 CONT - SN 851227**

**(Cartier) APPARATUS AND METHOD FOR FORMING HINGED TOP CIGARETTE  
BOX**

Jonah Adams, John Tomanovits, and Duane Wilder  
Engineering

An apparatus for forming a hinged top cigarette box having a cross-section with one or more arcuate surfaces from a one piece blank is provided.

See also D689A&B

Glenn/F&N/Pisano  
3-12-92 Filed in PTO.  
10-20-92 Notice of allowance (fee due January 20--Pisano will pay).

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2020109487

PM 1479 (D680, D732) - SN 757243

(Tomorrow) SMOKING ARTICLE WRAPPER FOR CONTROLLING BURN RATE AND METHOD FOR MAKING SAME

S. D. Baldwin, N. Gautam, K. S. Houghton, R. M. Rogers, J. L. Ryder  
Chemical Research

Relates to the control of the burn rate of a cigarette. The burn rate is controlled by the use of a paper wrapper to which regions of cellulosic material is applied and bonded. The cellulosic material is applied during a manufacturing step for the base paper wrapper, either off or on-line of the paper wrapper-forming machine.

Schardt/F&N/Gross

9-10-91 Filed in PTO; assignment recorded.

2-24-92 IDS filed.

5-4-92 Meeting with Glenn/F&N--1429 and 1479 to remain separate in US--1429 cited in 1479.

8-18-92 Preliminary amendment filed.

9-25-92 1st action (response due December 25--Radulescu drafting).

Foreign filed in Australia, Canada, Finland, Japan, Norway and EPO.

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2020109488

PM 1481 (D674) - SN 666926

(Beta) FLAVOR GENERATING ARTICLE

C. H. Morgan and W. A. Nichols  
Physical Research

An article is provided in which a replaceable flavor generating medium is electrically heated by a set of permanent reusable heaters to evolve inhalable flavors or other components in vapor or aerosol form. Each heater heats only a portion of the available flavor generating medium so that a plurality of individual puffs of flavor-containing substance can be delivered sequentially to the consumer.

Glenn/F&N/Ingeman

3-11-91 Filed in PTO with IDS; assignment recorded.  
5-18-92 Notice of abandonment due to failure to respond to Office  
Action (which F&N never received).  
5-22-92 Petition to revive filed.  
6-9-92 Petition granted.  
6-16-92 1st action.  
8-14-92 Response filed.

Corresponding foreign applications files in Australia, Canada, Japan, Norway, Korea, Turkey and the EPO.

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2020109489

**PM 1482 - SN 915423**

(Beta) ELECTRICAL FLAVOR GENERATOR AND METHOD FOR MAKING SAME

Grier Fleischauer and B. J. Keen  
Engineering

Improved electrical heater for flavor generator which can heat a plurality of individual flavor beds individually without significantly affecting the neighboring flavor beds.

Glenn/F&N/Radulescu  
7-17-92 Filed in PTO; assignment recorded.  
11-6-92 IDS filed.

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**PM 1483 CIP - SN 796631**

(Filter Technology - Project Bold) CONCENTRIC SMOKING FILTER HAVING DISCRETE TOW AND WEB FILTER MEDIA

C. W. Arterbery, W. T. Callaham, G. D. Keritsis, M. F. White  
Cigarette Technology

A concentric smoking filter in which one of the filter media is a fibrous tow, such as fibrous cellulose acetate tow, and one of the filter media is a web material, such as paper, is provided. The filter improves the taste, particularly, of ultra-light cigarettes.

Schardt/F&N/Ingerman  
11-22-91 Filed in PTO; assignment recorded.  
1-29-92 Supplemental IDS filed.  
7-13-92 1st action.  
9-18-92 Response filed.

No foreign filing on CIP--JES reviewing original 1483 foreign with Abitz in Germany to circumvent problems with Filtrona.

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2020109490

PM 1484 CIP - SN 766050

(Pack Coupon for Ft Box) CIGARETTE PACK WITH PARTLY REMOVABLE  
INNERFRAME

Donald H. Evers  
Engineering

A box-like cigarette pack has an innerframe which initially extends upward into what is normally a cutout in the front of the innerframe. This extension may then continue over the top of the cigarettes in the pack. The innerframe is weakened along the line which normally defines the cutout. When the consumer first opens the pack, he or she can remove the innerframe extension by tearing or separating along this line of weakening. Thereafter, the pack is like a normal pack. Additional information can be printed on the removable portion or portions of the innerframe. If provided, the portion which initially extends over the cigarette tops is a convenient size for use as a coupon or the like.

See also CIP 1581 and 1583

Glenn/F&N/Howowitz

9-26-91 Filed in PTO; assignment recorded.

8-6-92 Notice of allowance.

10-8-92 Issue fee paid.

Combined with PM 1484II for foreign filing.

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2020109491

PM 1485 (D679) - SN 709023

(Beta-Related) CONTROL DEVICE FOR FLAVOR-GENERATING ARTICLE

F. M. Sprinkel  
Physical Research

A control device for electrically heated flavor generators. Sensors detect user lip activity associated with taking a draw and trigger heating of flavor-generating materials.

Glenn/F&N/Bergin

5-31-91 Filed in PTO.

9-16-92 Notice of allowance (fee due December 16).

9-28-92 Supplemental notice of allowability.

9-30-92 F&N instructed to wait to pay issue fee.

Corresponding foreign applications filed in Australia, Canada, Japan, Norway, Korea, Turkey, and the EPO designating all countries.

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2020109492



PM 1486 CONT - SN 798846

SCORED INNERFRAME FOR HINGED LID CIGARETTE PACK

X. M. Pham  
Engineering

A hinged lid cigarette pack with rounded edges having an outer sleeve member within which is fitted an innerframe. The innerframe is provided with a front wall, side walls, rear walls and scored transitional panels interposed between the walls. The innerframe is bent about the score lines to conform closely to and fit within the contours of the rounded edges of the cigarette packs. The rear walls of the innerframe wrap around the cigarette bundle contained in the pack and frictionally engage the rear rounded corners of the pack, hinge and lid, thereby stabilizing the closed position of the hinged lid.

Glenn/F&N/Isackson/Panichi

11-25-91 Filed in PTO with preliminary amendment.

1-16-92 1st action.

4-16-92 Response filed.

6-30-92 2nd action.

9-30-92 Response filed.

10-15-92 Advisory action: request for reconsideration does not overcome rejection.

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2020109493

PM 1488 - SN 573883

## INTERLOCKING CLOSURE FOR HINGED LID BOXES

X. M. Pham  
Engineering

A hinged lid box having an innerframe and interlocking means for maintaining the box substantially closed. The interlocking means includes a panel of material including a tab that is secured to the inside of the front panel of the lid so that the tab is opposed to but not secured to the lid surface whereby the tab is disposed to pass inside the innerframe during closure. The innerframe is thus frictionally engaged by the tab and the opposing surface of the front panel of the lid to retain the lid closed. The tab may be formed by a slit in the panel of material and provided with a score line to facilitate bending the tab at the desired location to engage the innerframe. The tab also may be formed by cutting a notch in the panel, thereby providing a space between the tab and the panel from which the tab is cut. The notch may be provided with a configuration that facilitates inserting the tab behind the innerframe. Means for raising the tab a distance above the surface of the panel of material also may be provided. More than one tab may be used, preferably two tabs spaced apart and proximate to the front corners of the lid. The interlocking means is suitable for boxes having rounded corners.

Glenn/F&N/Panichi

8-28-90 Filed in PTO.

10-15-90 Assignment recorded.

11-30-90 Action - restriction requirement.

12-20-90 Response filed electing claims 1-43 and 55-58.

2-5-91 1st action.

7-5-91 Response filed.

9-20-91 2nd action.

12-19-91 Response filed.

1-28-92 3rd action allowing all claims; discussed by phone with Examiner; notice of allowance will be sent.

4-8-92 4th action.

7-2-92 Response and formal drawings filed.

8-12-92 Supplemental amendment filed.

8-19-92 Interference declared by Patent Office.

\* \* \* \* \*

**PM 1488 INTERFERENCE - SN 102920**

INTERLOCKING CLOSURE FOR HINGED LID BOXES

X. M. Pham  
Engineering

Glenn/F&N/Panichi  
8-19-92 Interference declared by Patent Office.

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**PM 1490 DES - SN 568317**

(Design) BOX HAVING VERGE LINES AND PINSTRIPING AT REGIONS ABOUT  
ROUNDED SIDE PORTIONS

R. L. Graham, X. M. Pham, Donald H. Evers, and F. M. Della Crosse  
Engineering

Design for a box having verge lines and pinstriping at regions about  
rounded side portions.

See also CIP PM 1524DES

Glenn/F&N/Isackson  
8-15-90 Filed in PTO; assignment recorded.  
1-8-92 IDS filed.

No corresponding foreign applications.

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2020109495

PM 1496 (D692) - SN 693656

## AIR VENTILATION SYSTEM

J. O. Lephardt and R. A. Tamol  
Analytical/Development Engineering

Relates to an air ventilation system for ventilating, heating, cooling or purifying areas such as rooms, houses, theaters, offices or any partitioned spaces. Comprises an air permeable carpet material placed over perforated flooring that is supported by a below-floor air distribution system and an in-ceiling air exhaust vent system.

Glenn/F&N/Brook

4-30-91 Filed in PTO; assignment recorded.

7-30-91 IDS filed.

5-22-92 1st action rejecting all claims.

10-22-92 Response filed.

Corresponding foreign applications filed in Australia, Canada, Japan, Korea, Singapore, and the EPO designating all countries.

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2020109496

PM 1497 (D495) - SN 671010

## TAMPER-INDICATING WRAPPERS

R. J. Versic and D. D. Emerick (Ronald T. Dodge Co.)  
Chemical Research

A tamper-indicating wrapper in which multi-layer, laminated wrappers wherein a visible change between layers of the wrapper indicate that the wrapper has been punctured or that there has been tampering with the wrapper or its contents. The wrapper may be composed of two or more plies of packaging material such as films made from ethylene vinyl alcohol copolymer or from polyolefins such as polypropylene. In one construction, a transparent or translucent laminated wrapper becomes opaque upon rupture or puncture. In other constructions, a transparent or translucent wrapper becomes colored at the site of the rupture or puncture.

Schardt/F&N/Hintz

3-18-91 Filed in PTO; assignment recorded.  
5-28-91 IDS filed.  
2-4-92 Election requirement.  
2-12-92 Response.  
3-6-92 1st action.  
6-4-92 Amendment filed.  
8-26-92 2nd action (response due November 26--Hintz drafting response).  
11-10-92 Action to Versic/Emrick for comment.

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2020109497

**PM 1498 CONTII - SN 855491**

(Paper Technology) PROCESS FOR MAKING WRAPPERS FOR SMOKING ARTICLES WHICH MODIFY THE BURN RATE OF THE SMOKING ARTICLE

J. L. Myracle  
Product Development

A process for making smoking article wrappers so as to modify the mass burn rate of the smoking article.

Schardt/F&N/Hubbard

3-23-92 Filed in PTO.  
6-8-92 Supplemental IDS.  
6-9-92 Notice of allowance (fee due September 9).  
8-26-92 Drawing of current configuration sent to F&N.  
9-2-92 Supplemental IDS references considered by PTO. No change in status.  
9-3-92 Petition to have issue fee paid in parent case applied in this case.

\* \* \* \* \*

**PM 1501 (D694) - SN 805617**

(BETA) LOW MASS RADIAL ARRAY HEATER FOR FLAVOR GENERATING ARTICLE

F. M. Sprinkel and E. C. Grollmund  
R&D

Relates to electric heating elements used to heat a flavor generating medium in a flavor generating article. Heating element is arranged in a radial array.

Glenn/F&N/Schoneman

12-12-91 Filed in PTO; assignment recorded.  
1-21-92 IDS and formal drawings filed.

No corresponding foreign applications.

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2020109498

**PM 1511 - SN 800053**

**MAGNESITE-MAGNESIUM HYDROXIDE FILLERS FOR SMOKING ARTICLE WRAPPERS**

J. A. Fournier, A. G. Kallianos, J. B. Paine, K. F. Podraza and J. I. Seeman  
R&D

Novel fillers for smoking article wrappers comprising magnesite-magnesium hydroxide complexes. Smoking articles employing wrappers containing the fillers of the invention exhibit significantly reduced sidestream smoke.

See also PM 1441, 1444, 1466, and 1494

Glenn/F&N/Hintz

11-27-91 Filed in PTO; assignment recorded.

3-19-92 IDS filed.

10-1-92 1st action (response due January 1).

10-26-92 Action to Seeman for comments.

Combined with PM 1444 for foreign filing.

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2020109499

PM 1513 (D677) - SN 826836

PINLESS BELT FEEDER

B. Eugene Bailey and W. Randy Sweeney  
Engineering

Device for maintaining volumetric flow control of particulate and fiber-like materials. Particularly useful for transporting high moisture, finely sliced tobacco between storage and processing.

Glenn/F&N/Harnett

1-28-92 Filed in PTO.

3-23-92 Assignment recorded.

7-23-92 Election requirement.

8-21-92 Response filed.

10-14-92 1st action (response due January 14).

No corresponding foreign applications.

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2020109500



PM 1515 (D706) - SN 660932

SMOKING COMPOSITIONS CONTAINING A TARTRATE SALT FLAVORANT-  
RELEASE ADDITIVE

Y. Houminer and J. Naworal  
Chemical Research

This invention provides smoking compositions which contain a novel tartrate salt flavorant-release additive, such as an acetal derivative. Under cigarette smoking conditions, a combustible filler and/or paper wrapper additive pyrolyzes and releases benzaldehyde flavorant as a volatile component of the cigarette smoke.

Schardt/Depaoli/Giancola

2-26-91 Filed in PTO; assignment recorded.

4-6-92 1st action.

5-28-92 Response filed.

8-6-92 2nd action.

9-10-92 Amendment filed.

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2020109501

PM 1518 (D714) - SN 684568

*\*ISSUED\**

PAPER WRAPPER HAVING IMPROVED ASH CHARACTERISTICS

E. B. Sanders, S. D. Baldwin, B. L. Goodman, C. W. Arterbery, J. L. Myracle  
Cigarette Technology

Relates to a paper wrapper construction for use in conjunction with a smoking article, such as a cigarettes. Specifically, the paper wrapper of the invention has improved ash characteristics.

See also D480 and PM 1596

Glenn/F&N/Miraglia

4-12-91 Filed in PTO; assignment recorded.

11-10-92 Issued: 5161551.

No corresponding foreign applications were filed.

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PM 1520 (D72) - SN 829876

(D. H. MAX) LAMINATED BELT FOR HIGH SPEED DELIVERY OF FREE FLOWING MATERIAL

J. F. Budjinski II, C. G. Atwell, M. T. Garthaffner, M. D. Belcastro

Directed to a laminated belt for use in a device which delivers free flowing material into receiving spaces separating filter plugs, as the plugs move on a conveyor.

Glenn/F&N/Harnett

1-31-92 Filed in PTO; assignment recorded.

6-30-92 Notice of allowance.

9-23-92 Issue fee paid and formal drawings filed.

Corresponding foreign applications filed in Japan, Korea, EPO.

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2020109502

PM 1522 - SN 717064

(NET) PROCESS FOR IMPREGNATION AND EXPANSION OF TOBACCO

K. H. Cho, T. J. Clarke, J. M. Dobbs, E. B. Fischer, J. M. G. Nepomuceno, and R. Prasad  
Physical Research

Relates to a process for expanding the volume of tobacco using carbon dioxide.

Glenn/F&N/McCabe

6-18-91 Filed in PTO; assignment recorded.  
4-14-92 1st action allowing all claims except 34.  
4-30-92 IDS filed.  
8-14-92 Response and formal drawings filed.  
10-21-92 2nd action (response due January 21).

Corresponding foreign applications filed in Argentina, Australia, Brazil, Canada, China, Finland, Hong Kong, India, Japan, Mexico, New Zealand, Norway, Philippines, Singapore, Korea, Taiwan, Venezuela, Yugoslavia, and the EPO designating all countries.

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2020109503

**PM 1523 - SN 742323**

**PRODUCT APPEARANCE INSPECTION METHODS AND APPARATUS EMPLOYING  
LOW VARIANCE FILTER**

K. A. Cox, H. M. Dante, R. J. Maher  
Physical Research

A comprehensive package inspection method to identify bad packages by means of automatic inspection.

Related to PM 1514, 1334, Itran Agreement File

Glenn/F&N/Jackson

8-8-91 Filed in PTO; assignment recorded.  
9-10-91 IDS filed.  
12-10-91 Formal drawings filed.  
1-28-92 Supplemental IDS filed.  
10-26-92 Restriction requirement (response due November 26).  
11-12-92 Draft amendment received--claims 1-20 elected.

Corresponding foreign applications filed in Canada, Japan, Korea, and the EPO.

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**PM 1524DES CIP - SN 631790 \*ABANDONED FOR CONT.\***

**(Cartier) DESIGN - BOX HAVING VERGE LINES AND PINSTRIPING AT REGIONS  
ABOUT ROUNDED SIDE PORTIONS**

R. L. Graham, Z. M. Pham, D. H. Evers, and F. M. Della Crosse  
Engineering

Glenn/F&N/Panichi

12-21-90 Filed in PTO.  
8-25-92 F&N instructed to file corrected drawing.  
7-20-92 Notice of allowance.  
10-19-92 Abandoned for continuation.

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2020109504

PM 1524/1490 CIP CONT - SN 29/000594

(Cartier) DESIGN - BOX HAVING VERGE LINES AND PINSTRIPING AT REGIONS ABOUT ROUNDED SIDE PORTIONS

R. L. Graham, Z. M. Pham, D. H. Evers, and F. M. Della Crosse  
Engineering

Glenn/F&N/Panichi  
10-19-92 Filed in PTO.

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PM 1525 - SN 700759

(Project Gold) CIGARETTE PACKAGING MACHINE AND APPARATUS

J. M. Adams, A. Amendola, F. M. Della Crosse, R. Gallino, J. M. S. Haskins, D. Moir, X. M. Pham, K. B. Shepard, and R. M. Stewart

Relates to manufacturing cigarette packages in which the packaging stock is coated with adhesive before it is supplied to the packaging machine and the machine provides means for activating the adhesive, and preferably setting the adhesive after it has been activated.

Glenn/F&N/Ingerman/Brook  
5-15-91 Filed in PTO.  
2-13-92 1st action rejecting all claims.  
4-30-92 IDS filed.  
6-15-92 Response filed.

Corresponding foreign applications filed in Australia, Brazil, Canada, China, Japan, Korea, Taiwan, Russia, and the EPO designating all countries.

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2020109505

PM 1526 - SN 802567

(Cartier) ROUNDED END CIGARETTE BOX

D. H. Evers and X. M. Pham  
Engineering

Relates to a rounded end hinged top cigarette box and a blank for forming the same. The cigarette box includes an inner and outer sleeve and inner and outer oval-shaped end flaps on both ends.

Glenn/F&N/Cassingham

12-5-91 Filed in PTO; assignment recorded.

3-5-92 IDS filed.

5-5-92 Foreign filing recommendation: hold and review with Marketing.

7-7-92 Supplemental IDS filed.

7-13-92 Election requirement.

8-4-92 Second supplemental IDS filed.

8-12-92 Response filed.

Corresponding foreign applications filed in Canada, Japan, Korea, EPO.

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2020109506

**PM 1529 (D733) - SN 940357**

**(Beta) MULTIPLE-ELEMENT HEATER FORMED ON A PAPER SUBSTRATE**

S. C. Deevi and D. Kellogg  
R&D

Relates to heaters having multiple resistive heating elements for use in electrically-powered smoking devices. The heating elements are intended to heat, but not burn, an aerosol generating medium, which is contained within the smoking device.

See also D687, PM 1569, PM 1613

Glenn/F&N/Treyz

9-3-92 Filed in PTO.

11-11-92 Letter to F&N regarding draft IDS: review and consult with Ingerman.

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**PM 1531 (D735) - SN 718781**

**IMAGE INSPECTION METHODS AND APPARATUS.**

D. M. Ennis  
Product Evaluation

Relates to methods and apparatus for determining whether or not an image is substantially like other images.

Glenn/F&N/Jackson

6-21-91 Filed in PTO; assignment recorded.

11-2-92 Notice of allowance (issue fee due February 2--Jackson will pay).

Corresponding foreign applications filed in the EPO designating all countries.

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2020109507

**PM 1533 (D738) - SN 866331**

(Project Tomorrow) WRAPPER WITH BANDS OF RECONSTITUTED TOBACCO SHEET FOR SMOKING ARTICLES

E. B. Sanders  
R&D

Relates to wrappers for smoking articles which control burn rate.

Glenn/F&N/Panichi  
4-9-92 Filed in PTO without signature.  
6-15-92 Assignment recorded.  
8-28-92 IDS filed.

\* \* \* \* \*

**PM 1534 (D742, D793) - SN 82842**

(D. H. Max) APPARATUS FOR HIGH SPEED DELIVERY OF FREE FLOWING MATERIAL

J. F. Budjinski, C. G. Atwell, M. T. Garthaffner  
Engineering

Directed to an apparatus for high speed delivery of free flowing material.

Glenn/F&N/Harnett  
1-31-92 Filed in PTO; assignment recorded.  
10-1-92 Notice of allowance (issue fee due January 4).  
10-26-92 F&N instructed to pay issue fee.

Combine with PM 1520 for foreign filing if possible, otherwise, no foreign filing.

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2020109508



PM 1535 (D743) - SN

(D. H. Max) ALIGNMENT OF FILTER AND CIGARETTE COMPONENTS

M. T. Garthaffner and R. Honaker  
Engineering

Method and apparatus for alignment of filter components to product charcoal filter cigarettes without combining machine. Keeps the gap between the cigarette and filter components to 5mm or less which is needed to assemble final product; especially when components are short.

Glenn/F&N/Brook  
9- -92 Filed in PTO.

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PM 1539 (D748, 749) - SN 837722

(Project Tomorrow) APPARATUS AND METHOD FOR LAMINATING PATCHES  
OF A FIRST WEB MATERIAL ONTO A SECOND WEB MATERIAL

A. L. Collins, B. J. Keen, G. B. Reid, R. R. Ritt, W. H. Stevens, H. W. Vogt

Schardt/F&N/Hintz  
2-18-92 Filed in PTO; assignment recorded.  
5-29-92 1st action.  
8-31-92 Response filed.  
9-17-92 Notice of allowance (issue fee due December 17).  
10-27-92 Hintz instructed to pay issue fee.

No corresponding foreign applications.

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2020109509

**PM 1539 DIV - SN**

(Project Tomorrow) APPARATUS AND METHOD FOR LAMINATING PATCHES  
OF A FIRST WEB MATERIAL ONTO A SECOND WEB MATERIAL

A. L. Collins, B. J. Keen, G. B. Reid, R. R. Ritt, W. H. Stevens, H. W. Vogt

Schardt/F&N/Hintz

10-27-92 Hintz instructed to file divisional on original claims 17-18.

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**PM 1540 (D750, 751, 752) - SN 837721**

(Project Tomorrow) APPARATUS AND METHOD FOR LAMINATING PATCHES  
OF A FIRST WEB MATERIAL ONTO A SECOND WEB MATERIAL

A. L. Collins, B. J. Keen, G. B. Reid, R. R. Ritt, W. H. Stevens, H. W. Vogt

2-18-92 Filed in PTO; assignment recorded.

No corresponding foreign applications.

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**PM 1541 (D753, 754) - SN 837486**

(Project Tomorrow) APPARATUS AND METHOD FOR LAMINATING STRIPS OF  
A FIRST WEB MATERIAL ONTO A SECOND WEB MATERIAL

A. L. Collins, B. J. Keen, G. B. Reid, R. R. Ritt, W. H. Stevens, H. W. Vogt

2-18-92 Filed in PTO.

No corresponding foreign applications.

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2020109510

**PM 1542 (D755) - SN 853530**

(Project Tomorrow) SMOKING ARTICLE WRAPPER AND APPARATUS AND METHOD FOR MAKING SAME

A. L. Collins, B. J. Keen, G. B. Reid, R. R. Ritt, W. H. Stevens, H. W. Vogt  
Engineering

Relates to cigarette wrappers which modify the burn rate of the cigarette and to an apparatus and method for efficiently producing such wrappers in commercial quantities.

Schardt/F&N/Radulescu

3-18-92 Filed in PTO; assignment recorded.

7-15-92 IDS filed.

8-13-92 1st action.

11-12-92 Response filed.

No corresponding foreign applications.

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**PM 1544 - SN 931997**

(Beta - Disposable Heater) REINFORCED CARBON HEATER WITH DISCRETE HEATING ZONES

B. J. Keen, G. S. Fleischhauer, S.  
Engineering

Relates to electric heating elements arranged in a tubular array used to heat a flavor generating medium in a flavor generating article.

Glenn/F&N/Ingeman

8-19-92 Filed in PTO.

10-5-92 Formal drawings filed.

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2020109511

**PM 1546 (D688) - SN 932224**

(Beta - Disposable Heater) ELECTRICAL RESISTANCE HEATER WITH DISCRETE HEATING ZONES

S. C. Deevi, Leo Lanzl, J. F. Whidby, et al  
R&D

Relates to an electrical resistance heater having a discrete heating segment configuration.

Glenn/F&N/Bergin

8- 19-92 Filed in PTO.

10-9-92 New documents to Lanzel for execution.

10-27-92 Called Lanzel to check status of documents.

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**PM 1547 (D740) - SN 926826**

(Project B&D) REUSABLE HARD-PACK CIGARETTE CASE

D. H. Evers and W. C. Harris  
Engineering

Relates to a limited-life reusable hard-pack cigarette case into which soft-pack cigarette containers may be inserted.

Schardt/F&N/Hersh

8-7-92 Filed in PTO; assignment recorded.

11-9-92 IDS filed.

\* \* \* \* \*

2020109512

PM 1550 (CIP OF PM1481) - SN

(Beta) FLAVOR GENERATING ARTICLE AND METHOD FOR MAKING SAME

A. Collins, M. E. Counts, A. Das, S. Deevi, G. Fleischhauer, C. Higgins, W. Houck, B. Keen, B. Lee, C. Lilly, B. Losee, H. McCafferty, C. Nichols, W. Raymond, R. Ripley, R. Ritt, G. Scott, F. M. Sprinkel, M. Watkins, S. Wrenn, F. Utsch

R&D/Engineering

Relates to articles in which flavor generating media are heated to release tobacco flavors, particularly electrically heated articles.

Glenn/F&N/Radulescu  
9-11-92 Filed in PTO.

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PM 1553 (D770) - SN 757567

A VOLUMETRIC CHEMICAL REACTION SYSTEM

R. L. Augustine and S. Tanielyan(Seton Hall)

Provides a multipurpose volumetric chemical reaction system which operates at constant pressure and volume, and has electronic automation means for calculating kinetic parameters and a concentration-time plot from the system data output. The automated system is adapted to conduct and monitor either gas-consuming or gas-generating reactions. gas input or gas venting is accomplished in timed constant volume pulses.

Schardt/Depaoli/Giancola  
9-11-91 Filed in PTO; assignment recorded.  
6-24-92 Office Action.  
8-25-92 Amendment filed.

No foreign filing.

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2020109513

**PM 1556 (D776) - SN 757563**

**A FLOW LIQUID-PHASE CHEMICAL REACTION SYSTEM**

R. Augustine and Glen Wolosh (Seton Hall)

Provides a flow liquid-phase chemical reaction system for selective conversion of organic compounds with a gas reactant. Has novel means for control of the molar ratio of gas reactant and organic compound dissolved in a solvent medium flowing through a catalyst bed.

Schardt/Depaoli/Giancola

9-11-91 Filed in PTO; assignment recorded.

7-30-92 1st action.

10-5-92 Amendment filed.

No foreign filing.

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**PM 1557 (D777) - SN 788447**

**ACYLOXYLATION OF ALKYLAROMATIC COMPOUNDS WITH PALLADIUM-TIN CATALYSTS**

R. L. Augustine and S. K. Tanielyan (Seton Hall)  
R&D

Process for preparing a surface coprecipitated catalyst with improved activity for carbon monoxide oxidation.

Schardt/Depaoli/Giancola

11-6-91 Filed in PTO; assignment recorded.

10-8-92 Notice of allowance (fee due January 8).

11-16-92 Giancola instructed to pay fee.

No foreign filing.

\* \* \* \* \*

2020109514

**PM 1557DIV - SN 842646**

ACYLOXYLATION OF ALKYLAROMATIC COMPOUNDS WITH PALLADIUM-TIN CATALYSTS

R. L. Augustine and S. K. Tanielyan (Seton Hall)  
R&D

Process for preparing a surface coprecipitated catalyst with improved activity for carbon monoxide oxidation.

Schardt/Depaoli/Giancola

2-27-92 Filed in PTO.

9-24-92 Notice of allowance (fee due December 24).

11-16-92 Giancola instructed to pay fee.

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**PM 1559 (D785) - SN 802340**

CIGARETTE HOPPER VANE JAM PREVENTION DEVICE

R. Brinker  
Engineering

Relates to improvements in feeding cigarettes through hoppers or other similar containers.

Schardt/F&N/Cassingham

12-4-91 Filed in PTO; assignment recorded.

1-6-92 Formal drawings filed.

1-9-92 IDS filed.

Corresponding foreign applications filed in Brazil, Japan and the EPO.

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2020109515

PM 1560 (D786) - SN

APPARATUS AND METHOD FOR APPLYING FLUID TO A MOVING CONTINUOUS WEB

J. Budjinski, S. Campbell, and T. Ward  
Engineering

Relates to manufacturing cigarette filter plugs in which a moving continuous web of filter tow is coated with plasticizer using an apparatus including a multichamber cylinder control system.

Schardt/F&N/Lack  
11- -92 Filed in PTO.

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PM 1565 (D783) - SN 822588

TAX-STAMPABLE HALF-CARTON

D. H. Evers

Relates to detachable paperboard double half-cartons for cigarette packs in which two attached half-cartons are run through a standard tax-stamping machine and then may be separated for sale as separate, individual half-carton units.

Schardt/F&N/Hersh  
1-17-92 Filed in PTO; assignment recorded.  
7-13-92 Notice of allowance.  
10-8-92 Issue fee paid.

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2020109516



PM 1568 (D794) (ACE 8) (CONT of PM 1590) - SN 849295

(Project Ace) TWO HALF CARTONS RELEASABLY JOINED TO FORM A DUAL CARTON

R. E. Talley and E. Wooldridge  
Engineering

Relates to the releasable connection of two separate cigarette cartons to form a dual carton compatible with commercially available tax-stamping machinery.

See also PM 1565, 1566, 1567

Schardt/F&N/Horowitz

3-10-92 Filed in PTO; assignment recorded.

8-20-92 Notice of allowance.

8-31-92 Amendment filed.

10-21-92 Issue fee paid.

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2020109517

**PM 1570 - SN 684563**

**\*ISSUED\***

**(Bold/Tomorrow) SMOKING ARTICLES USING NOVEL PAPER WRAPPER**

S. D. Baldwin, E. B. Sanders, J. L. Myracle, B. L. Goodman, C. W. Arterbery, W. A. Geiszler, B. Floyd, and W. E. Claflin  
Cigarette Technology

Specifically, uses wrappers which alter the characteristics of the smoking article including puff count, tar delivery and carbon monoxide delivery by adjustment of the paper wrapper's calcium carbonate filler level and of the paper wrapper's basis weight.

Glenn/F&N/Rhoads

4-12-91 Filed in PTO; assignment recorded.

12-8-92 Issued: 5168844.

Corresponding foreign applications filed in Canada, Japan, Korea, Egypt, Finland, Norway, Saudi Arabia, Turkey, and the EPO designating all countries.

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2020109518

PM 1572 (D778) - SN 713306

SMOKING COMPOSITIONS CONTAINING A PYRAZINEETHANOL FLAVORANT-  
RELEASE ADDITIVE

G. Chan and Y. Houminer  
Chemical Research

Provides smoking compositions having incorporated therein a flavorant component which is characterized by lack of mobility and/or volatility at ambient temperature. Under normal smoking consitions, the flavorant-release additive imparts improved flavor to mainstream smoke and improved aroma to sidestream smoke. For incorporation in wrappers.

Schardt/Depaoli

6-11-91 Filed in PTO; assignment recorded.

7-22-92 Notice of allowance.

9-29-92 Issue fee paid.

Corresponding foreign applications filed in Japan, Korea, and the EPO designating all countries.

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PM 1572 DIV - SN 946521

SMOKING COMPOSITIONS CONTAINING A PYRAZINEETHANOL FLAVORANT-  
RELEASE ADDITIVE

G. Chan and Y. Houminer  
Chemical Research

Provides smoking compositions having incorporated therein a flavorant component which is characterized by lack of mobility and/or volatility at ambient temperature. Under normal smoking consitions, the flavorant-release additive imparts improved flavor to mainstream smoke and improved aroma to sidestream smoke. For incorporation in wrappers.

Schardt/Depaoli

9-17-92 Filed in PTO.

10-28-92 Notice of allowance (fee due January 28--Giancola will pay).

\* \* \* \* \*

PM 1581 (CIP OF PM 1484) (D804) - SN 766048    *\*ISSUED\**

(Pack Coupon for FT Box) CIGARETTE BOX WITH ATTACHED COUPON

D. H. Evers  
Package Engineering

See also PM 1538

Glenn/F&N/Jackson  
9-26-91    Filed in PTO; assignment recorded.  
11-3-92    Issued: 5160024.

No foreign filing.

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2020109520

PM 1582 (D805) - SN 891444

APPARATUS FOR AUTOMATIC BAGGING OF COMPRESSED TOBACCO

John Tomanovits  
Engineering

Relates to apparatus for bagging compressed bricks of tobacco in a fully automated manner.

Glenn/F&N/Panichi

5-29-92 Filed in PTO.

8-10-92 Assignment recorded.

10-1-92 Notice of allowance.

10-15-92 F&N to pay issue fee.

No corresponding foreign applications.

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PM 1583 (D806) - SN 884741

ARTICLE TRANSFER REJECTION APPARATUS AND METHOD

M. Belcastro, D. Jones, C. Longest  
Engineering

Relates to an apparatus and method for removing selected articles, such as cigarettes, from a conveyor pathway during manufacturing or processing operations.

Glenn/F&N/Horowitz

5-15-92 Filed in PTO.

7-15-92 Assignment recorded.

8-14-92 IDS filed.

9-10-92 Supplemental IDS filed.

Combine with PM 1649 for foreign filing.

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2020109521

PM 1584 (D807) SN

(Tomorrow/Beta) APPLICATION OF FLUIDIZED MATERIAL TO A SUBSTRATE  
USING INTERMITTENT CHARGES OF COMPRESSED AIR

E. Cutright, R. Reich, and R. Scott of Jewett and H. Vogt  
Engineering

Relates to a method and apparatus whereby repetitive treatment patterns  
are created without contact between the paper and the apparatus.

Glenn/F&N/O'Neill  
11- -92 Filed in PTO.

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PM 1585 (D808) - SN 847375

(Tomorrow/Beta) METHOD AND APPARATUS FOR APPLYING A MATERIAL TO  
A WEB

E. Cutright and R. Scott of Jewett and H. Vogt  
Engineering

Relates to a method and apparatus for treating paper with material in  
repetitive patterns in such a way that no contact is made between the  
paper and the apparatus.

See also PM 1679

Glenn/F&N/O'Neill  
3-6-92 Filed in PTO; assignment recorded.  
5-27-92 IDS filed.

Corresponding foreign applications filed in EPO, Argentina, Australia,  
Brazil, Canada, Czechoslovakia, China, Finland, Hungary, India, Indonesia,  
Japan, Korea, Mexico, Norway, Poland, Russian Federation, Sweden,  
Venezuela plus any other major paper manufacturing countries.

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2020109522

PM 1589 - SN 792617

(Project Ace) SEPARABLE OR DIVISIBLE LABEL CONTAINING UNIVERSAL PRICE CODE

J. A. DeBlasio, S. J. A. Douglad, J. L. Miller, X. M. Pham, and R. E. Talley,  
Engineering

Relates to the use of a label bearing indicia encoded for automatic pricing to connect two separate cigarette cartons, to form a combined dual carton, the indicia being positioned such that the code is rendered unreadable when the two cartons are separated.

Schardt/F&N/Horowitz

11-15-91 Filed in PTO; assignment recorded.

2-6-92 IDS filed.

4-7-92 1st action.

4-23-92 Supplemental IDS filed.

5-20-92 Response filed.

6-4-92 2nd action.

9-25-92 Response and terminal disclaimer filed.

Foreign: 5-5-92 Hold and review with Marketing

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2020109523

**PM 1591 (ACE 500, 501) - SN 832691**

(Project Ace) TAX-STAMPABLE HALF-CARTON

J. M. Adams, C. N. Chance, J. A. DeBlasio, D. H. Evers, W. C. Harris, M. A. Kirby, R. W. Newsome, R. E. Talley  
Engineering

Relates to detachable paperboard double half-cartons for cigarette packs in which a dual half-carton is run through a standard tax-stamping machine and then may be separated for sale as separate, individual half-carton units.

Schardt/F&N/Hersh  
2-7-92 Filed in PTO.  
5-5-92 IDS and formal drawings filed.

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**PM 1595 (ACE 3, 15) - SN 837377**

(Project Ace) TAX-STAMPABLE HALF-CARTON

J. M. Adams, C. N. Chance, J. A. DeBlasio, D. H. Evers, W. C. Harris, M. A. Kirby, R. W. Newsome, R. E. Talley  
Engineering

Relates to detachable paperboard double half-cartons for cigarette packs in which a dual half-carton is run through a standard tax-stamping machine and then may be separated for sale as separate, individual half-carton units.

Schardt/F&N/Hersh  
2-14-92 Filed in PTO; assignment recorded.  
5-5-92 IDS filed.  
5-21-92 1st action.  
9-18-92 Response filed.

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2020109524



PM 1596 (D790) - SN 684603

CIGARETTE AND WRAPPER WITH CONTROLLED PUFF COUNT

S. D. Baldwin, R. W. Dwyer, D. J. Newman, B. Floyd, R. M. Rogers, E. B. Sanders, and B. L. Goodman  
Cigarette Technology

Relates to a paper wrapper construction for use in conjunction with a smoking article, such as a cigarette. Specifically, the paper wrapper alters the characteristics of the smoking article including burn rate, puff count, and tar delivery with the use of fine particle size calcium carbonate as a mineral filler.

Glenn/F&N/Miraglia

4-12-91 Filed in PTO.

6-10-91 Assignment recorded.

7-3-91 IDS filed.

3-2-92 1st action rejecting all claims.

7-2-92 Amendment filed.

9-14-92 2nd action - final (response due December 14).

9-30-92 Supplemental IDS filed.

Corresponding foreign applications filed in Canada, Japan, Korea, Egypt, Finland, Norway, Saudi Arabia, Turkey, and the EPO designating all countries.

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2020109525

PM 1597 (Ace 18, D823) (CIP OF PM1590) - SN 809922

TWO CARTONS JOINED AS A SINGLE UNIT SEPARABLE INTO TWO SINGLE CARTONS

J. Adams, C. Chance, J. DeBlasio, D. Evers, W. Harris, M. Kirby, R. Newsome, X. Pham, R. Talley

Relates to the connection of two separate cigarette cartons to form a dual carton.

Schardt/F&N/Horowitz

12-19-91 Filed in PTO; assignment recorded.

8-20-92 Notice of allowance.

9-30-92 Horowitz instructed to file divisional.

10-21-92 Issue fee paid.

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PM 1597 DIV - SN

TWO CARTONS JOINED AS A SINGLE UNIT SEPARABLE INTO TWO SINGLE CARTONS

J. Adams, C. Chance, J. DeBlasio, D. Evers, W. Harris, M. Kirby, R. Newsome, X. Pham, R. Talley

Relates to the connection of two separate cigarette cartons to form a dual carton.

Schardt/F&N/Horowitz

10-16-92 Filed in PTO with preliminary amendment.

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2020109526

PM 1598 (CIP OF PM1590) - SN 810677

*\*ISSUED\**

TWO CARTONS JOINED AS A SINGLE UNIT SEPARABLE INTO TWO SINGLE CARTONS

J. Adams, C. Chance, J. DeBlasio, D. Evers, W. Harris, M. Kirby, R. Newsome, X. Pham, R. Talley

Relates to the connection of two separate cigarette cartons to form a dual carton.

Schardt/F&N/Horowitz

12-19-91 Filed in PTO; assignment recorded.

11-3-92 Issued: 5160023.

Corresponding foreign applications filed in Canada, Japan, Korea, and the EPO designating all countries.

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PM 1599 (CIP OF PM 1590) (D825) - SN 901677

(ACE 16) METHOD OF ATTACHING TWO HALF-CARTONS

C. N. Chance, J. A. DeBlasio, D. H. Evers, W. C. Harris, M. A. Kirby, R. W. Newsome, R. E. Talley  
Engineering

Relates to a method of attaching two half-cartons to form a dual half-carton structure.

Schardt/F&N/Wildes

6-22-92 Filed in PTO; assignment recorded.

8-20-92 Notice of allowance.

10-21-92 Issue fee paid.

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2020109527

PM 1600 (D826) CIP of PM1590 - SN 829375

(ACE 14) DUAL CARTON

J. M. Adams, C. N. Chance, J. A. DeBlasio, D. H. Evers, M. A. Kirby, R. W. Newsome, R. E. Talley  
Engineering

Relates to the connection of two cigarette cartons to form a dual carton.

Schardt/F&N/Horowitz

2-2-92 Filed in PTO; assignment recorded.

7-13-92 Notice of allowance.

9-30-92 Issue fee paid.

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PM 1601 (D827) (CIP OF PM1590) - SN 901682

(ACE 13) DUAL HALF-CARTON STRUCTURE AND METHOD OF FORMING SAME

J. M. Adams, C. N. Chance, J. A. DeBlasio, D. H. Evers, M. A. Kirby, R. W. Newsome, R. E. Talley  
Engineering

Relates to a method of attaching paperboard half-cartons of cigarette packs, wherein two half-cartons may be secured together, run as a single carton through a standard tax-stamping machine and later separated for sale as individual half-carton units.

Schardt/F&N/Wildes

6-22-92 Filed in PTO; assignment recorded.

8-7-92 IDS filed.

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2020109528

**PM 1603 (D829) (CIP OF PM 1590) - SN 831348**

(ACE 10) TWO CARTONS JOINED AS A DUEL CARTON SEPARABLE INTO TWO INDIVIDUAL CARTONS

J. M. Adams, C. N. Chance, J. A. DeBlasio, D. H. Evers, W. C. Harris, M. A. Kirby, R. W. Newsome, R. E. Talley  
Engineering

Relates to the connection of two separate cigarette cartons to form a dual carton.

Schardt/F&N/Horowitz

2-5-92 Filed in PTO; assignment recorded.

4-27-92 IDS filed.

7-13-92 Notice of allowance.

9-15-92 Issue fee paid.

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**PM 1604 (CIP OF PM1603) (D830) - SN 892766**

(ACE 5 AND 700) EASILY SEALABLE, OPENABLE, AND RECLOSABLE CARTON

J. M. Adams, C. N. Chance, J. A. DeBlasio, D. H. Evers, W. C. Harris, M. A. Kirby, R. W. Newsome, R. E. Talley  
Engineering

Schardt/F&N/Horowitz

6-3-92 Filed in PTO; assignment recorded.

7-13-92 Notice of allowance.

10-1-92 Issue fee paid and formal drawings filed.

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2020109529

PM 1612 (D814) - SN

(NET) PROCESS FOR ADJUSTING THE MOISTURE CONTENT OF TOBACCO

Warren Winterson , John Crump, E. B. Fischer  
R&D

Covers use of the process on tobacco. Relates to the use of a humid-air stream having a relative humidity very near the equilibrium moisture content of the tobacco to contact the tobacco and thereby alter the OV content of the tobacco.

Glenn/F&N/McCabe  
10-30-92 Filed in PTO.

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PM 1612 II - SN

(NET) PROCESS FOR ADJUSTING THE MOISTURE CONTENT OF ORGANIC MATERIALS

Warren Winterson, John Crump, E. B. Fischer  
R&D

**Assignee: Frigoscandia**

Covers the use of the process of organic materials generically. Relates to the use of a humid-air stream having a relative humidity very near the equilibrium moisture content of the tobacco to contact the tobacco and thereby alter the OV content of the tobacco.

Glenn/F&N/McCabe  
10-30-92 Filed in PTO.

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2020109530

PM 1616 - SN 710514

*\*ISSUED\**

HINGED LID CIGARETTE CARTON WITH INNERFRAME, AND BLANK AND METHOD THEREFOR (for Marlboro Medium introduction)

Linda S. Latif

Relates to cigarette pack cartons with resemble and function like hinged lid cigarette boxes.

Glenn/F&N/Jackson/Horowitz

6-3-91 Filed in PTO.

11-10-92 Issued: 5161733.

Corresponding foreign applications filed in Australia, Brazil, Canada, Japan, Korea, and the EPO designating all countries.

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PM 1624 (D835) - SN

(NET) CONVEY BELT FOR TREATMENT OF PARTICULATE SOLID MATERIAL

E. B. Fischer, M. S. North and W. D. Winterson, L. E. B. Jaxman, L. F. Olsson, N. S. Selander  
R&D/Frigoscandia

Improved endless conveyor belt that can be used to reorder or dry tobacco, or treat other particulate solid materials.

Glenn/F&N/Krasnow/Flynn

10-30-92 Filed in PTO.

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2020109531

PM 1625 (D836) - SN

(NET) APPARATUS FOR TREATMENT OF SOLID MATERIAL

J. C. Crump, E. B. Fischer, R. C. Wilson, W. D. Winterson, L. E. B. Jaxman, G. M. Norberg, L. F. Olsson  
R&D/Frigoscandia

Improved machine that can be used to reorder or dry tobacco, or treat other particulate solid materials.

Glenn/F&N/Krasnow/Flynn  
10-30-92 Filed in PTO.

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PM 1631 (D843) - SN 825513

(Pack Coupon for FT Box) HINGED LID BOX WITH ATTACHED POP OUT COUPON

D. H. Evers  
Engineering

Relates to a cigarette pack having additional surface areas which can be used for a coupon or other information which can be easily removed.

Glenn/F&N/Nix  
1-24-92 Filed in PTO with IDS; assignment recorded.  
4-10-92 Supplemental IDS filed.  
6-10-92 1st action.  
9-10-92 Response filed.  
9-25-92 Sample to Marketing for opinion re: FF.

No corresponding foreign applications.

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2020109532



**PM 1634 (CIP OF PM1514) - SN 905898**

(Project OSIRIS) PRODUCT GAUGE METHODS AND APPARATUS FOR USE IN THE OPTICAL DETERMINATION OF THE ACCEPTABILITY OF PRODUCTS

Richard M. Waugh and Robert J. Maher

Relates to methods and apparatus for a product gauge are provided that may be used to enhance the performance of optical product inspection means.

Glenn/F&N/Rhoads

6-29-92 Filed in PTO; assignment recorded.

8-13-92 IDS and formal drawings filed.

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**PM 1636 (CIP of PM 1590) - SN 827113**

(ACE 22) CARTON PROVIDING EASY ACCESS TO PACKAGED GOODS CONTAINED THEREIN

D. H. Evers, W. C. Harris, R. E. Talley  
Engineering

Relates to cigarette cartons which allow for easy access to the cigarette packs contained therein.

Schardt/F&N/Horowitz

1-28-92 Filed in PTO; assignment recorded.

3-20-92 Notice of allowance.

3-31-92 IDS filed.

4-8-92 Formal drawings filed.

6-18-92 Issue fee paid.

Corresponding foreign applications filed in Canada, Japan, Korea, and the EPO designating all countries.

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2020109533

**PM 1637 (ACE 23) - SN 836836**

(ACE) MULTIPLE UNIT CARTON

J. A. DeBlasio  
Engineering

Relates to the connection of at least two cigarette cartons to form a multiple unit carton compatible with commercially available tax-stamping machinery.

Schardt/F&N/Horowitz

2-19-92 Filed in PTO; assignment recorded.

3-31-92 IDS filed.

4-27-92 Supplemental IDS filed.

7-21-92 1st action.

10-8-92 Response filed.

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**PM 1643 (D866, 867) - SN 874542**

HIGH SPEED VACUUM ASSIST FREE FLOWING MATERIAL INSERTER

J. Budjinski, G. Atwell, L. Stevens, M. Garthaffner, B. Keen, G. Fleischhauer  
Engineering

Relates to a device for very high speed delivery of a controlled amount of free flowing material into discrete receiving spaces between filter plugs in partially constructed cigarette filters.

Glenn/F&N/Harnett

4-27-92 Filed in PTO; assignment recorded.

9-15-92 Action allowing all claims.

Corresponding foreign applications filed in Japan, Korea, EPO.

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2020109534

PM 1649/1666/1470 (D878) - SN 884746

APPARATUS FOR OPTICALLY INSPECTING CYLINDRICAL SURFACES

Gary Grollmund, Cary Longest and Barry Smith  
Engineering

Provides uniformly distributed light along a cycloidal surface without interference from shadows or light spotting. the uniformly distributed light and adjustable intensity arrays allow surface attributes along the cycloidal surface to be enhanced or dampened for visual or optical detection of inspection methods.

Glenn/F&N/Guiliano

5-15-92 Filed in PTO.

6-29-92 Assignment recorded.

8-28-92 IDS filed.

9-2-92 Formal drawings filed.

Corresponding foreign applications filed in Brazil, Japan, EPO.

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PM 1650 (D873) - SN

PRODUCTION OF  $\alpha$ -MENTHYL ISOPROPENYL CARBONATE

E. R. Burkhardt and B. W. Dryden (Callery Chemical Company)  
R&D

Schardt/Depaoli/Giancola

11-12-92 Filed in PTO.

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2020109535

**PM 1655 (D886) - SN 943747**

(BETA) FLAVOR GENERATING UNIT FOR FLAVOR GENERATING ARTICLES

M. E. Counts, S. E. Wrenn, S. Deevi, A. Das  
R&D

Relates to flavor generating media which are heated electrically to release tobacco flavors.

Glenn/F&N/Radulescu  
9-11- 92 Filed in the PTO.

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**PM 1656 (D887) - SN 823698**

QUICK CHANGE GEAR ARM

M. C. Luckado  
Manufacturing

Relates to a method and apparatus to facilitate rotating the printer die in the printer section of a cigarette rod making machine in either a clockwise or counter-clockwise direction without disassembling the printer gearing.

Schardt/F&N/Panichi  
1-21-92 Filed in PTO.  
3-13-92 Assignment recorded.  
6-17-92 IDS and formal drawings filed.  
8-24-92 1st action (response due November 24).

No corresponding foreign applications.

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2020109536

**PM 1662 (ACE 24, 25) (CIP OF PM1590) - SN 829415**

(PROJECT ACE) CIGARETTE CARTON WITH MODIFIED TUCK-IN FLAP

C. N. Chance, J. A. DeBlasio, S. A. Douglas, D. H. Evers, R. E. Talley

Relates to the design of tuck-in flaps on cigarette cartons such that the cartons may be passed through commercially available tax-stamping equipment without modifying or adjusting the tax-stamping equipment.

Schardt/F&N/Horowitz

2-3-92 Filed in PTO.

7-13-92 Notice of allowance.

9-30-92 Issue fee paid.

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**PM 1675 - SN 911274**

SMOKING COMPOSITIONS CONTAINING AN ALPHA-HEXYLCINNAMALDEHYDE  
RELEASE ADDITIVE

G. Chan, B. Edwards, H. Grubbs, Y. Houminer, C. R. Howe, J. D. Naworal, J. Paine, K. Podraza, T. Sanders, J. Seeman, R. Southwick  
R&D

Provides smoking compositions which contain a novel 8-hydroxycarboxylate flavorant-release additive. Under cigarette smoking conditions, a combustible filler and/or paper wrapper additive pyrolyzes and releases alpha-hexylcinnamaldehyde as a volatile flavorant component of the cigarette smoke.

Schardt/Depaoli

7-9-92 Filed in PTO; assignment recorded.

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2020109537

PM 1668 (D898) - SN 943505

(BETA) ELECTRICALLY-POWERED SEMICONDUCTOR HEATER

A. Das and S. C. Deevi  
R&D

Relates to electrical heaters for electrically heated flavor generating articles.

Glenn/F&N/Radulescu  
9-11-92 Filed in PTO.

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PM1683 - SN \_\_\_\_\_

APPARATUS FOR APPLYING GLUE TO CLOSURE STAMPS FOR INSERTION ONTO PACKAGES

J. W. Giles, M. M. Grimsley, C. P. Pendelton, S. R. Rinehart  
Engineering

Relates to the application of glue to closure stamps for insertion onto packages such as cigarette packs.

Glenn/B-D/Kopecki  
9-28-92 Filed in PTO.

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2020109538

PM 1689 - SN 07/946,845

METHOD OF RECOVERING TOBACCO FROM STEMMERY DISCARD

E. C. Patterson  
Engineering

Relates to methods and apparatus for separating tobacco particles from soil particles in a stemmery discard.

Glenn/B-D/Reynolds

9-18-92 Filed in PTO with IDS.

11-4-92 Formal documents for executed from BD

11-12-92 Formals executed and to BD.

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2020109539